

REMARKS

This Amendment is submitted in reply to the final Office Action mailed on March 23, 2006. No fee is due in connection with this Amendment. The Director is authorized to charge any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112843-61 on the account statement.

Claims 1-35 are pending in this application. In the Office Action, Claims 1-35 are rejected under 35 U.S.C. §112, second paragraph and Claims 1-35 are rejected under 35 U.S.C. §103. In response Claims 1, 8, 15, 23, 25-26 and 28 have been amended, and Claims 6 and 30 have been canceled. This amendment does not add new matter. In view of the amendment and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

Claim 8 has been amended for clarifying purposes.

In the Office Action, Claims 1-35 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Patent Office alleges that the term "high viscous" is unclear. In response, Applicants have amended the claims to remove this term. Based on at least these noted reasons, Applicants believe that Claims 1-35 fully comply with 35 U.S.C. §112, second paragraph.

Accordingly, Applicants respectfully request that the rejection of Claims 1-35 under 35 U.S.C. §112 be withdrawn.

In the Office Action, Claims 1-35 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,359,052 B1 to Trexler et al. ("*Trexler*"); Claims 1-35 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,548,587 B1 to Bagrodia et al. ("*Bagrodia I*"); and Claims 1-35 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,337,046 to Bagrodia et al. ("*Bagrodia II*"). Applicants believe these rejections are improper and respectfully traverse them for at least the reasons set forth below.

Applicants have amended independent Claims 1, 23, 25, 26 and 28 to delete the element polyester. Amended Claims 1, 23, 25, 26 and 28 recite, in part, a moulding material having at

least one thermoplastic polymer selected from the group consisting of polyamides, polyether esters, polyester amides and mixtures thereof. The amendment is supported in the specification, for example, at page 7, line 27 to page 8, line 19. In contrast, the cited references fail to disclose or suggest every element of the present claims.

Applicants respectfully submit that *Trexler* nor *Bagrodia II* fail to disclose or suggest the optimal ranges of fibrous filling agents and impact modifiers as required, in part, by the present claims. In fact, *Trexler* and *Bagrodia II* state that these additives are not required at all, which teaches away from the present claims. See, *Trexler*, column 11, lines 45-46; *Bagrodia II*, column 7, line 29. Therefore, one having ordinary skill in the art would not be motivated to arrive at the present claims in view of *Trexler* or *Bagrodia II*. Moreover, the cited references fail to provide any reasonable expectation of success for obtaining the present invention.

Bagrodia I also fails to disclose or suggest the optimal ranges of fibrous filling agents and/or impact modifiers as required, in part, by the present claims. Moreover, *Bagrodia I* does not even recognize that in combination with nano-fillers these additives make a contribution to the melt strength because *Bagrodia I* explicitly states that these optional additives are “not required.” See, *Bagrodia I*, column 22, line 42. Consequently, *Bagrodia I* fails to provide any reasonable expectation of success for obtaining the present invention and would not motivate the skill artisan to arrive at the present claims.

Bagrodia I is entirely directed to improving the gas barrier. This was solved by addition of platelet particles (*Bagrodia I*, column 22, lines 64-65; column 1, lines 23-24; column 5, lines 29-31). The skilled artisan would find no motivation in *Bagrodia I* to use a combination of nano fillers, fibrous filling agents and impact modifiers for achieving increased melt strength for extrusion blow moulding in accordance with the present invention. One skilled in the art would have to use an inventive step to achieve the present invention. The combination of nano fillers with two selected additives in the selected ranges would not be obvious after reading *Bagrodia I* and its statement that these additives are “not required,” and *Bagrodia I* would lead the skilled person away from finding any effective results in their synergetic effect with respect to the melt strength of the present invention.

Applicants have surprising found optimal and coordinating ranges for each of the three required additives (nano-scale fillers, fibrous filling agents, impact modifiers). This is not a

result of routine experimentation as the optimal amounts cannot be determined independently of each other because of their coaction/synergy. Therefore, the effect of the additional additives regarding the capability of extrusion blow moulding and melt strength in accordance with the present invention is not predictable for the skilled artisan. As a result, the present invention would not have been obvious to one having ordinary skill in the art.

A criterion for the increase of the melt strength according to the present invention is the at least 30 % higher melt strength compared with moulding material containing normal (typical) mineral fillers instead of nano fillers in the same amount. In contrast to *Bagrodia I*, which traces an effect on the melt strength only back to the platelet particles (see, *Bagrodia I*, column 26, line 51), the increase of at least 30 % according to the present invention additionally comprises a synergistic effect of the coaction of the three required additives.

Applicants respectfully submit with the Patent Office's assertion that the burden is on the applicant to show that no "typical mineral filler" exists that would not give the instantly claimed difference in melt strength is improper because the typical mineral filler itself is basis of comparison. As a result, its melt strength cannot be 30 % higher than its melt strength. As discussed previously, *Bagrodia I* already proved that there is no typical mineral filler that increases the melt strength significantly because *Bagrodia I* would have disclosed this. In contrast, *Bagrodia I* uses its fillers as neutral fillers. See, *Bagrodia I*, column 12, lines 36-46 (pigments, fillers); column 22, lines 42-53 (fillers, talc, titanium dioxide).

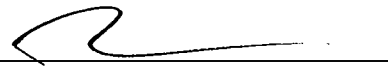
In sum, the cited references relied upon in the Office Action fail to teach or suggest a high-viscous moulding material suitable for an extrusion blow moulding process including fibrous filling agents in amounts of from 5 to 30 wt.-% per 100 parts by weight of the polymer matrix and impact modifiers in amounts of from 3 to 12 wt.-% per 100 parts by weight of the polymer matrix as recited in the claimed invention. Indeed, there is absolutely no guidance in the cited references for one of skill in the art to choose the optimal amounts of fillers to achieve the unexpectedly improved melt strength as Applicants have done. Further, additives are not even required in the cited references and are only optionally added if desired. Therefore, Applicants respectfully submit that an ordinary skilled artisan would not have been motivated by the cited references to choose the optimal amounts of the fibrous filling agents and the impact modifiers.

For at least the reasons discussed above, neither *Trexler*, *Bagrodia I* nor *Bagrodia II* teaches, suggests, or even discloses all of the elements of the present claims, and thus, the cited references fail to render the claimed subject matter obvious.

Accordingly, Applicants respectfully request that the obviousness rejections with respect to Claims 1-35 be reconsidered and the rejections be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,
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